## We Claim

1. A packet processing method,

wherein a processing to be performed for the data of a packet in a packet flow is selected for each input packet flow.

- 2. The packet processing method according to claim 1; wherein said processing is selected according to an input line to which said packet flow is inputted.
- 3. The packet processing method according to claim 1; wherein said processing is selected according to an identifier included in said packet data.
- 4. The packet processing method according to claim 1; wherein said processing is selected by referring to a table where an input line to which said packet flow is inputted and a processing to be selected are corresponded to each other.
- 5. The packet processing method according to claim 1; wherein said processing is selected by referring to a table where an identifier included in said packet data and a processing to be selected are corresponded to each other.

- 6. The packet processing method according to claim 1; wherein a processing to be performed for packet data is at least one of encapsulation, decapsulation, encryption, decryption, compression, and expansion.
  - 7. A packet processing apparatus, comprising:
- a processor selector for extracting identification information that denotes a characteristic of a data flow composed of an input packet from said packet;
- a processing selecting table for holding a pair of data items that are identification information and a processing to be performed for said packet in advance;
- a table searcher for searching information in said processing selecting table according to a search key, which is identification information extracted by said processor selector;
- a packet processor for processing said packet according to a result of searching in said table; and
  - a port selector for sending said processed packet.
- 8. The packet processing apparatus according to claim 7;

wherein identification information that denotes a characteristic of a data flow composed of an input packet is extracted from the header information of said packet.

9. The packet processing apparatus according to claim  $\ensuremath{\mathtt{8:}}$ 

wherein said identification information that denotes a characteristic of said data flow is at least one of a source address and a destination address.

10. The packet processing apparatus according to claim 8:

wherein said packet processor is one of a plurality of types of packet processors, each being independent for a processing type to be performed for packets.

- 11. A packet processing apparatus, comprising:
- a processor selector for deciding the source of an input packet;
- a processing selecting table for holding a pair of data items that are identification information and a processing to be performed for said packet in advance;
- a table searcher for searching information in said processing selecting table according to a search key, which

is a source of said packet decided by said processor selector;

a packet processor for processing said packet according to a result of searching in said table; and a port selector for sending said processed packet.

12. The packet processing apparatus according to claim 11;

wherein an input line to which said packet is inputted is decided as the source of said packet.

13. The packet processing apparatus according to claim 11;

wherein the source of said inputted packet is decided according to the header information of said packet.